

NPIC ROUTING SLIP

Approved For Release 2003/01/28 : CIA-RDP78B04770A002600120002-0

FROM:

ch/PID

DATE:

8 June

	TO	INITIALS	DATE	REMARKS
DIR				
DEP/DIR				
EXEC/DIR				
ASST FOR ADMIN				
<i>Suggest Panel 2</i>				
ASST FOR OPS				
ASST FOR PA				
ASST FOR P&D	1	<i>Ch</i>		
CH/CSD				
CH/IPD				
CH/PD				
CSD				
CH/TID				
CH/CIA/PID				
CH/DIA/XX-4				
CH/DIA/AP-IP				
CH/SPAD				
LO/CGS/CIA				
LO/NSA				

see attached comment & pending suggestion

25X1

FM 30 (REV 5-64)

Declass Review by
NIMA/DOD

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SECRET

PAG/M-995/65
8 June 1965

MEMORANDUM FOR: Assistant for Plans and Development, NPIC

SUBJECT: Procurement of Circular Slide Rules

1. A continuing requirement exists among the photo interpreters of PAG/NPIC and CIA/PID for a more advanced slide rule compatible with the current "state of the art" of photo interpretation. Presently the photo interpreter is using a slide rule designed primarily for manned aircraft photographic missions which is not adaptable to current needs. The photo interpreter continues to have the ever standing need to compute measurements "at his desk" for PI information purposes while exploiting film and arriving at his conclusions. This requirement in no way transgresses the more sophisticated mensural data determined by the photogrammetrists of the Technical Intelligence Division/NPIC that is published in NPIC PI reports but rather as a supplement to them. Two "advanced" slide rules have been suggested by employees and were evaluated by the PI elements. Of the two, the 8 inch circular slide rule, described below and the attached model, is preferred by the photo interpreters. Therefore, it is requested that the necessary arrangements be made by your staff for development and production of same.

2. The circular slide rule is eight (8) inches in diameter and is made in three (3) distinct parts; these are:

a. An eight (8) inch diameter base on which is inscribed equivalent ground measurements from one (1) foot up to one hundred thousand (100,000) feet. A photograph scale from one to one thousand (1:1,000) to one to one million (1:1,000,000) is located beneath the six (6) inch covering disc and can be observed only through the covering scale window.

b. A six (6) inch diameter movable inner disc having a scale window and equivalent image measurements in millimeters (outer scale) from 0.3 to 100.0 and thousandths of a foot (inner scale) from .001 to 1.000. A scribed index mark is present through the radial center of the scale window.

c. A movable, transparent arm having a radial index line that will allow interpretation of ground distances on the outer scale from image measurements on the inner scale, at scale values shown in the window.

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3. The finished circular slide rule should be made of durable plastic with appropriate labeling for various scale and measurement identification. The PAG/NPIC and CIA/PID is interested in obtaining the cost per item with an initial requirement for approximately three hundred (300) slide rules. A sample of the circular slide is forwarded with this memorandum; although its physical dimensions are not exact, it shows the general configuration and associated scales. Exhibit A is a revision of the initial suggestion, Exhibit B, and incorporates a greater variation in photograph scale (1:1,000 to 1:1,000,000) and a wider latitude in image measurement capabilities (1 foot to 100,000 feet). Before production is started it is requested that a sample of the computer be made by the prospective manufacturer for PAG/PID evaluations.

25X1

Colonel, USA
Assistant for Photographic Analysis, NPIC

CONCU

Date: 8 June

Chief, CIA/PID

Attachment:

sample of circular slide

Distribution:

- Orig & 1 - Addressee
- 1 - Chm./Suggestion Awards Panel
- 1 - CIA/PID
- 2 - Asst for PA

* see attached "Suggestion" submitted
in 1961 & again in 1965 &
still pending. Turn down has always
stated that the PI would soon be
"on line" to computer & would not need slide rule.
Jwb

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SUGGESTION NO. 61-533



SUGGESTION ACKNOWLEDGEMENT

(Do Not Write in This Space)

THANK YOU FOR YOUR SUGGESTION. IT HAS BEEN ASSIGNED THE ABOVE NUMBER. IT WILL BE GIVEN CAREFUL CONSIDERATION AND YOU WILL BE INFORMED PROMPTLY OF THE ACTION TAKEN. YOUR INTEREST IN IMPROVING OPERATIONS IS COMMENDABLE & APPRECIATED.

DATE

10 Feb. 1964

AC

NAME OF SUGGESTER

TITLE OR SUBJECT OF SUGGESTION

Revised FI Slide Rule

CLASSIFICATION

S-E-C-R-E-T

SUGGESTION NO.

61-533

PRESENT METHOD Attached is a copy of a suggestion I submitted in June 1961 for the development of a new aerial photo (FI) slide rule. This proposal was declined by the CIA Suggestion Awards Committee on the grounds that the slide rule was expected to assume a minor role in the future and that the proposed changes to the existing slide rule did not seem to be sufficient reason for designing a new one that would almost immediately become obsolete.

I SUGGEST I am re-submitting this suggestion at this time because I feel it is still a useful one. Two and one-half years since it was first submitted, the FI slide rule is still enjoying widespread use by photo-interpreters at NPIC, and it is a standard piece of gear issued to analysts in FID, FAG and service detachments at NPIC. The future programs and procedures, which were to have made such a slide rule obsolete, have had much less impact than predicted -- as far as FI measurements are concerned. Furthermore, it is clear now that the slide rule will continue to play an important role in certain type of measurements made by the photo-interpreter, especially where comparative coverage is available. Remarkably accurate measurements have been made in numerous cases utilizing the slide rule with high-resolution stereo-microscopy. In certain test cases this accuracy was substantiated by later measurements obtained using computers and optical comparators. It is recognized that future systems may eventually provide the photo interpreter with a computer-type measurement capability right in his own work area. But even then, the FI slide rule will probably continue to be used in tactical

ADVANTAGES and during periods when computer gear is overloaded or inoperative because of programming or maintenance.

ADVANTAGES: The proposed changes to the slide rule are admittedly simple, but in terms of convenience and accuracy they are important and would definitely contribute to the use of the FI slide rule in obtaining reasonably precise measurements on a timely basis.

ATTACHMENTS:

- 1 - Suggestion No. 61-533 (Form 244)
- 2 - Evaluation of Suggestion (Form 244a)
- 3 - Photostat of Proposed New Slide Rule

FORM 244 USE PREVIOUS
7-61 EDITIONCLASSIFICATION
S-E-C-R-E-T

(47)

EMPLOYEE
PART 3 - RETURN COPY